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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,436	03/12/2001	Makoto Inoue	450108-02595	2310

7590 01/16/2003

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EXAMINER

RADA, ALEX P

ART UNIT	PAPER NUMBER
3714	

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/743,436	INOUE ET AL.
	Examiner	Art Unit
	Alex P. Rada	3714

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 01 November 2002.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 19-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 19-27 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

In response to the amendment filed November 1, 2002 in which the applicant has canceled claims 1-13, adds new claims 19-27, and claims 19-27 are pending in this application.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "the depth direction" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Kubo '659.
5. Kubo discloses a pet robot, light emitting means being apparent eyes provided on the head unit (figure 1), a control means for controlling the flashing of the light emitting means

(column 6, line 61 – column 7, line 7), and a semi-transparent cover (30). The examiner interprets the apparent (light emitting) eyes of the robot to be seen only when the light emitting means flash or turned on (column 6, line 61 – column 7, line 7).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 20-21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo '659 in view of Ho '223.

8. Kubo discloses the claimed invention as discussed above except for a plurality of lighting emitting means each having a different shape and /or color of light as recited in claim 20; The shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion as recited in claim 21; and The plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit as recited in claim 27. Ho teaches a plurality of lighting emitting means each having a different shape and /or color of light, the shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion, and the plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit. By having different shapes and patters of light for different emotion, one of ordinary skill in the art would be able to provide colorful light with different expression. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of the applicant's invention was made to modify the robot of Kubo to include a plurality of lighting emitting means each having a different shape and /or color of light, the shape and /or color of each light emitting means having a shape and /or color so as to match the different emotion, and the plurality of light emitting means are arranged at prescribed position of the head unit in the direction of the head unit as taught by Ho. To do so would be able to provide different expressions with colorful emitting lights.

9. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo '659 in view of Ho '223 as applied to claims 20-21 and 27 above, and further in view of Kamiya '772.

10. Kubo in view of Ho discloses the claimed invention as discussed above except for an external sensor for detecting surrounding and/or inputs from the outside as recited in claim 22; The control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion as recited in claim 23; The light emitting means flash in a flashing pattern suitable for the determined emotion as recited in claim 24; The flashing pattern is a flashing cycle as recited in claim 25; and The pet robot having a moving unit and a driving means as recited in claim 26. Kamiya teaches an external sensor for detecting surrounding and/or inputs from the outside, the control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion, the light emitting means flash in a flashing pattern suitable for the determined emotion, the flashing pattern is a flashing cycle, and the pet robot having a moving unit and a driving means. By having external sensors to receive different inputs, one of ordinary skill in the art would be able to trigger a more human like expression.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kubo in view of Ho to include an external sensor for detecting surrounding and/or inputs from the outside, the control means determines own emotion based on the outputs of the external sensor and previously-provided emotion models created by modeling emotion and selectively makes appropriate determined emotion, the light emitting means flash in a flashing pattern suitable for the determined emotion, the flashing pattern is a flashing cycle, and the pet robot having a moving unit and a driving means as taught by Kamiya. To do so would provide an interactive robot with pseudo-emotions to communicate to a user.

***Response to Arguments***

11. Applicant's arguments with respect to claims 19-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pohl '421 discloses a communication device incorporated in to a doll-like figure with at least one microphone, at least one speaker and communications module for exchange of data with a digital data network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 703-308-7135. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

*Asen*  
apr  
January 13, 2003



S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700